IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	HUBER ET AL.	Examiner:	COMLEY, ALEXANDER BRYANT
Serial No.:	10/535,067	Group Art Unit:	4156
Filed:	JULY 13, 2005	Docket No.:	2236USWO
Conf No.	1846		
Title:	PERISTALTIC PUMP		

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APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

This is an appeal from the Final Rejection mailed March 25, 2008 in which claims 7-14 were rejected. The Notice of Appeal was filed on May 8, 2008 making this Appeal Brief due on July 8, 2008. A three-month extension period is required in order for this Appeal Brief to be timely filed.

The $540 large entity fee under 37 C.F.R. §41.20(b)(2) for filing a brief in support of an appeal has been charged to a credit card. The $1110 large entity fee under 37 CFR § 1.136 for filing a three-month extension of time has also been charged to a credit card. Any underpayment or any additional fees should also be charged (and any overpayment should be credited) to Deposit Account No. 501257.

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REAL PARTY IN INTEREST

The real party in interest is Ecolab Inc., by virtue of an assignment recorded at 016517/0260. Ecolab is a Delaware corporation headquartered in St. Paul, Minnesota. Further information regarding Ecolab Inc. is available at http://www.ecolab.com.

RELATED APPEALS AND INTERFERENCES

There are no other prior and pending appeals, interferences or judicial proceedings known to Appellant, the Appellant's legal representative, or assignee Ecolab Inc. which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

STATUS OF CLAIMS

Six claims were filed with the application. A preliminary amendment was filed on May 13, 2005 canceling the original six claims and adding six new claims (claims 7-12). Six claims were amended and two new claims were added (claims 13-14)[1]. Claims 7-14 are pending.

No claims are allowed. Claims 7-9 and 10-14 are rejected. All of these rejections are appealed. A clean copy of the appealed claims 7-14 is reproduced in the Claims Appendix.

[1] Response of February 22, 2008

STATUS OF AMENDMENTS

All of the amendments made by Appellant have been entered and are included in the claims as listed in the Claims Appendix. No amendments were made after final rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

The invention according to independent claim 7 is drawn to a peristaltic pump. The peristaltic pump comprises (a) a base element[2], (b) an end wall on one side of the base element[3]; (c) a U-shaped recess located in the end wall[4]; (d) a plurality of rotating squeeze rollers located on the base element[5]; (e) a replaceable squeeze hose cartridge[6] comprising a squeeze hose carrier[7], a squeeze hose[8], and at least one coupling projection[9] where the coupling projection is configured to rest in the U-shaped recess and the squeeze hose is looped around the squeeze rollers when the squeeze hose cartridge is placed in the pump[10]; (f) a contact wall[11]; and (g) a pivot lever[12]; the contact wall being opposite the squeeze rollers, whereby the contact wall is connected to and movable by the pivot lever, wherein the squeeze hose is compressed by the squeeze rollers by moving the pivot lever which engages the contact wall against the squeeze hose[13].

Dependent claim 8 is directed to a peristaltic pump according to claim 7, the pivot lever further comprising a plurality of pivot cams[14] and the base[15] further comprising support detents[16] for receiving the pivot cams[17].

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[2] Specification on page 4 at line 15 and Figure 1 item 2
[3] Specification on page 4 at lines 15-16 and Figure 1 item 3
[4] Specification on page 3 at lines 13-14 and Figure 4
[5] Specification on page 3 at lines 7-9 and Figures 3 and 4 item 13
[6] Figure 4, items 14, 15, 16, and 17 collectively
[7] Specification on page 3 at lines 16-18, page 5 at lines 11-15 and Figure 4 item 16
[8] Specification on page 5 at lines 17-20 and Figures 3 & 4 item 14
[9] Specification on page 5 at lines 10-14 and Figures 3 & 4 item 15
[10] Figures 3 & 4
[11] Specification on page 5 at lines 17-18 and Figure 5 item 19
[12] Specification on page 6 at lines 9-10 and Figure 6 item 5
[13] Specification on page 6 at lines 9-19 and Figure 6
[14] Specification on page 3 at lines 7-9 and Figure 2 item 10
[15] Specification on page 4 at line 15 and Figure 1 item 2
[16] Specification on page 3 at lines 7-9 and Figure 2 item 11
[17] Specification on page 3 at lines 7-9

Dependent claim 9 is directed to a peristaltic pump according to claim 7, wherein the contact wall is part of a cover[18], the cover comprising slide rails and the base comprising guides for receiving the slide rails[19].

Dependent claim 10 is directed to a peristaltic pump according to claim 7, the end wall further comprising a detent tongue[20].

Dependent claim 11 is directed to a peristaltic pump according to claim 10, wherein the pivot lever is constructed as a yoke with a counter detent for detenting on a detent tongue when the housing is closed[21].

Dependent claim 12 is directed to a peristaltic pump according to claim 7, wherein the squeeze hose is provided on a hose carrier when the housing is open and is positionable at a housing end wall[22].

Dependent claim 13 is directed to a peristaltic pump of claim 7, wherein the pump is free of screws except for the attachment of the base to a surface[23].

Dependent claim 14 is directed to a peristaltic pump of claim 7, wherein the end wall comprises two sliding guides[24] and the cartridge comprises two coupling projections[25].

[18] Specification at page 3 lines 3-5
[19] Specification at page 3 lines 9-11
[20] Specification at page 3 lines 12-13
[21] Specification at page 3 lines 12-18
[22] Specification at page 4 lines 1-3
[23] Specification at page 2 lines 13-15 and Figures 1-6
[24] Specification at page 5 lines 1-4 and Figures 1-4 item 4
[25] Specification at page 5 lines 1-4 Figures 1-4 item 8

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to be reviewed on appeal include the following:

I. Whether claims 7-8, 10-14 were improperly rejected under 35 U.S.C. § 103(a) over Becker (U.S. Pat. No. 4,558,996) (hereinafter "*Becker*") in view of Lamadrid et al. (US 4,256,442) (hereinafter "*Lamadrid*")[26].

II. Whether claim 9 was improperly rejected under 35 U.S.C. § 103(a) over *Becker* in view of *Lamadrid* as applied to claims 7-8, 10-12 and 14 and further in view of *Leveen*.[27]

[26] The March 25, 2008 Final Rejection (hereinafter "Final Rejection")
[27] Final Rejection

ARGUMENT

I. REJECTION OF CLAIMS 7-8, 10-14 UNDER 35 U.S.C. §103(A):

ARGUMENTS CONCERNING CLAIMS 7-18, 10-14

The first issue on appeal is whether claims 7-8 and 10-14 were improperly rejected under 35 U.S.C. Section 103(a) as obvious over *Becker* in view of *Lamadrid et al.*

Becker was relied upon to disclose all elements of Appellants' peristaltic pump of claims 7-8 and 10-14 except a contact wall or a pivot lever.[28] *Lamadrid* was relied upon to disclose all remaining claim elements.[29] The Examiner argued that it would have been obvious to one of ordinary skill in the art to design a peristaltic pump with a faster and more easily loaded squeeze cartridge utilizing the techniques disclosed in *Becker* in combination with those disclosed in *Lamadrid*.

Appellants submit that *Lamadrid* is designed to allow easy access to the interior portion of the pump[30] by moving the pressure plate away from a closed position.[31] *Lamadrid* teaches, in particular, a peristaltic pump that allows operators to more easily access the pump tube in order to replace the pump tube. According to *Lamadrid*:

> the ends 88 of the tube 26 are fixed to their nipple fittings in a conventional manner whereby the length of the tube 26 trained about the roller cage assembly is fixed, an increase in the effective length of the tube 26 can only occur as a result of the tube being stretched.[32]

Appellants point out that *Lamadrid* requires replacement of the pump tube, not a cartridge including a pump tube.

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[28] Final rejection pages 3-4
[29] Final rejection pages 4-8
[30] Lamadrid column 2, lines 32-35
[31] Lamadrid column 4, lines 63-68
[32] Lamadrid column 7, lines 40-45

One can only imagine the difficulty presented an operator when replacing the *Lamadrid* tube. In order to replace the *Lamadrid* pump tube, *Lamadrid* requires placing one end of the tube on one nipple fitting, training the tube around the roller cage assembly, and then placing the remaining end on the second nipple fitting such that the tube length is effectively long enough only to reach from one end, through the roller cage and to the other nipple fitting. Despite allowing easy access to the pump tube, replacement of such tube in *Lamadrid* is at best tedious. This difficult, tedious replacement procedure is exactly the problem that Appellants' invention remedies.

In contrast to *Lamadrid*, Appellants' claims require a replaceable cartridge that an operator may simply snap into place. The replaceable cartridge of Appellants' invention includes, among other components, the squeeze hose. Also included in Appellants' replaceable cartridge is a coupling projection configured to rest in the recess and to allow the squeeze hose to loop around the squeeze rollers when the squeeze hose cartridge is placed in the pump. Placing the cartridge into the recess of Appellants' housing is all that is required when replacing a spent squeeze hose in Appellants' invention. Replacement of the squeeze hose in Appellants' invention is quick and repeatable despite the dexterity or experience of the operator.

The Examiner has not articulated a sufficient reason why one skilled in the art would have modified *Lamadrid* and *Becker* to arrive at the claimed subject matter.[33] *Becker*, in combination with *Lamadrid* fail to teach a replaceable cartridge allowing rapid, easy replacement of a peristaltic pump hose. As such, the §103(a) rejection based on these references should be reversed.

[33] *Ex parte Penhasi*, BPAI Appeal No. 2007-2534 (December 13, 2007)

II. REJECTION OF CLAIM 9 UNDER 35 U.S.C. §103(A):

ARGUMENTS CONCERNING CLAIM 9

The second issue on appeal is whether claim 9 was improperly rejected under 35 U.S.C. Section 103(a) as obvious over *Becker* in view of *Lamadrid* and further in view of *Leveen*.

Becker and *Lamadrid* were relied upon as addressed above regarding claims 7-8 and 10-11. *Leveen* was relied upon as providing guide slots on the housing base for guiding and receiving the cover's projections. The Examiner contended that the housing cover of *Leveen* is the same as Appellants housing cover operation.

As Appellants have already mentioned, *Lamadrid* is designed to allow easy access to the interior portion of the pump by moving the pressure plate away from a closed position. *Lamadrid* fails to teach Appellants' invention for the reasons discussed above. That is, *Lamadrid* and *Becker* together fail to teach a replaceable cartridge. *Leveen* does not overcome the shortcomings of *Becker* and *Lamadrid* because *Leveen* also fails to teach or even suggest a replaceable cartridge including a squeeze hose. None of the cited references, when taken alone or together, address overcoming the tedium of replacing a spent hose. Although *Lamdrid* (lever allowing access to tube) even taken with *Leveen* (removable cover) may teach accessability to the hose, they do not suggest or teach a readily replaceable cartridge. All cited references require dextrous manipulation of the hose beginning with connecting it to a first nipple attachment, then snaking it through the squeeze rollers, and finally connecting it to a second nipple attachment. None of the references teach or suggest a replaceable cartridge including the squeeze hose.

In view of the above comments, the claimed invention is neither anticipated nor rendered obvious since a *prima facie* case of obviousness has not been established. Accordingly, reversal

of the rejections over *Becker* in view of *Lamadrid* and over *Becker* in view of *Lamadrid* and *Leveen* is requested.

CONCLUSION

In view of the above, Appellant submits, based on the present facts and applicable law, that Appellant's invention as claimed is patentable.

It is earnestly requested that the Honorable Board reverse prior art-based rejections over *Becker*, *Lamadrid* and *Leveen* and allow all of the pending claims.

No other fee is believed to be required in connection with the filing of this amendment. Should any other fee be required, the Commissioner is authorized to charge the above-referenced deposit account and thereafter notify us of the same.

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PATENT TRADEMARK OFFICE

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CLAIMS APPENDIX

1-6. (Cancelled)

7. A peristaltic pump comprising:

a) a base element;

b) an end wall on one side of the base element;

c) a U-shaped recess located in the end wall;

d) a plurality of rotating squeeze rollers located on the base element;

e) a replaceable squeeze hose cartridge comprising a squeeze hose carrier, a squeeze hose, and at least one coupling projection where the coupling projection is configured to rest in the U-shaped recess and the squeeze hose is looped around the squeeze rollers when the squeeze hose cartridge is placed in the pump.

f) a contact wall; and

g) a pivot lever;

the contact wall being opposite the squeeze rollers, whereby the contact wall is connected to and movable by the pivot lever, wherein the squeeze hose is compressed by the squeeze rollers by moving the pivot lever which engages the contact wall against the squeeze hose.

8. The peristaltic pump according to claim 7, the pivot lever further comprising a plurality of pivot cams and the base further comprising support detents for receiving the pivot cams.

9. The peristaltic pump according to claim 7, wherein the contact wall is part of a cover, the cover comprising slide rails and the base comprising guides for receiving the slide rails.

10. The peristaltic pump according to claim 7, the end wall further comprising a detent tongue.

11. The peristaltic pump according to claim 10, wherein the pivot lever is constructed as a yoke with a counter detent for detenting on a detent tongue when the housing is closed.

12. The peristaltic pump according to claim 7, wherein the squeeze hose is provided on a hose carrier when the housing is open and is positionable at a housing end wall.

13. The peristaltic pump of claim 7, wherein the pump is free of screws except for the attachment of the base to a surface.

14. The peristaltic pump of claim 7, wherein the end wall comprises two sliding guides and the cartridge comprises two coupling projections.

EVIDENCE APPENDIX

1. 35 USC §103(a)
2. Final Rejection of USSN 10/535,067
3. U.S. 4,256,442 (*Lamadrid et al.*)
4. U.S. 4,558,996 (*Becker*)
5. U.S. 4,813,855 (*Leveen et al.*)
6. U.S. Patent Application SN 10/535,067, for a "Peristaltic Pump".
7. *Ex parte Penhasi*, BPAI Appeal No. 2007-2534 (December 13, 2007)

RELATED PROCEEDINGS APPENDIX

None.